Work Order ID 90375

90375

Tuesday, June 11, 2013 3:13:42 PM

Item ID: D119-646-214 **Accept** *N900040100* **Setup Start** *NS1*

Revision ID:

Item Name: Float Skidtube w/ Training Wearplates, RH **Stop** *NS2*

Start Date: 9/17/2012 **Start Qty:** 1.00 *1*

Required Date: 9/17/2012 **Req'd Qty:** 1.00 *1*

Cust Item ID:

Customer:

Reference: REWORK PER ECN 12-644

Approvals: **Process Plan:** CMC, **Date:** 13-6-11 **Tooling:** **Date:** **Run Start** *NR1*

QC: **Date:** **SPC (Y/N):** **Date:** **Stop** *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
IIN-D119-646	B								
150		0.00			DAS 6 9-89				
150									
Packaging		0.00							
Packaging	Memo								

-PULL FROM STK:
1 X D119-646-214 B87041 CHG001

REWORK PER ECN12-675
(PER DEO D3887-B-1) & ECN13-534 (DSI 9594-011)

MUST GO UP TO CHANGE 004

ensure kit is kept in original box !
ECN 12-644, 12-675 & 13-534

DART Dart Aerospace Ltd. 1270 ABERDEEN ST. HAWKESBURY, ON, CANADA K6A 1K7 TC APPROVAL # 09-89 TEL: 1-613-632-5200

P/N	D119-646-214	CHG	CHG001
DESC.	Float Skidtube, RH	STC	SR02024SE
LOT	B87041	STC	
MODEL	Agusta A119/AW119MKII	STC	

PATENTS US 5735484 CA 2222180 EUROPEAN No. 0828655 MADE IN CANADA D2728-2

1x 13/10/03

160		0.00							
160									
HandFinish		0.00							
Hand Finishing	Memo								

* STRIP ENTIRE SKIDTUBE

REMOVE D3849-045 X 1 AND D3849-047 X 1 AND SCRAP

REPLACE WITH NEW D3849-045 X 1 B 40401
D3849-047 X 1 B 90402

1x 13/10/03

PTO
LAST PAGE!

B90375

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

DART AEROSPACE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

Rework	☐
Scrap	☐
Use-as-is	☐
Suspected Unapproved	☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐
Machining ☐	Small Fab ☐	Prod. Eng. Coor. ☐	Quality ☐
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐
Large Fab ☐	Composite ☐	Supplier ☐	☐

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

- ☐ Bending
- ☐ Centre Not Concentric
- ☐ Cracks
- ☐ Crimp/Kink/Ripple/Wave
- ☐ Cuffs
- ☐ Crushing
- ☐ Heat Treat
- ☐ Inspection Strip in Tube
- ☐ Marks/Chatter
- ☐ Turning Sequence
- ☐ Wave/Twist in Tube

General

- ☐ Bend
- ☐ BOM/Route
- ☐ Broken/Damage/Defect
- ☐ Burrs
- ☐ Contamination
- ☐ Countersink
- ☐ Cut Too Short
- ☐ Drawing
- ☐ Drill Holes
- ☐ Finish
- ☐ Fit/Function
- ☐ Folio/Program
- ☐ Grain
- ☐ Hardware
- ☐ Inspection Incomplete/Unqualified
- ☐ Instructions Incomplete/Unclear
- ☐ Misaligned/off center
- ☐ Mislabeled
- ☐ Misread
- ☐ Off-set
- ☐ Out of Calibration
- ☐ Out of Sequence
- ☐ Outside Dimensions
- ☐ Over/Under tolerance
- ☐ Part Incorrect
- ☐ Part Lost/Missing
- ☐ Part Moved
- ☐ Positioned Wrong
- ☐ Power Loss/Surge
- ☐ Pressure/Forced
- ☐ Set-up
- ☐ Temperature/Cure
- ☐ Weld
- ☐ Wrong Stock Pulled
- ☐ Other

Work Order ID 90375

Tuesday, June 11, 2013 3:13:42 PM

90375

Item ID: D119-646-214 **Accept** *N900040100* **Setup Start** *NS1*

Revision ID: **Stop** *NS2*

Item Name: Float Skidtube w/ Training Wearplates, RH

Start Date: 9/17/2012 **Start Qty:** 1.00 *1*

Required Date: 9/17/2012 **Req'd Qty:** 1.00 *1*

Cust Item ID:

Customer:

Reference: REWORK PER ECN 12-644

Approvals: **Process Plan:** **Date:** **Tooling:** **Date:** **Run Start** *NR1*

QC: **Date:** **SPC (Y/N):** **Date:** **Stop** *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
170 *170* QC Quality Control	QC5- Inspect part completeness to step on W/O	0.00				1			
	Memo	0.00							
175 *175* Skidtubes Skidtubes		0.00							
	Memo	0.00							

DAS 27 B6 26

2-Drill 1.87 & 3.74" holes using DT9494, locate from FWD cap hole (verify measurement) AS PER DEO3887-B-1

OPEN to finished size

Deburr and blow out chips from inside of tube.

weld spacers 2 x D2579 B 92473 PER ECN 12-675

A/R M12527

BE B-06-25

13-6-25

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

DART AEROSPACE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

Rework ☐
Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐
Machining ☐ Small Fab ☐ Prod. Eng. Coor. ☐ Quality ☐
Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐
Large Fab ☐ Composite ☐ Supplier ☐

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

☐ Bending
☐ Centre Not Concentric
☐ Cracks
☐ Crimp/Kink/Ripple/Wave
☐ Cuffs
☐ Crushing
☐ Heat Treat
☐ Inspection Strip in Tube
☐ Marks/Chatter
☐ Turning Sequence
☐ Wave/Twist in Tube

General

☐ Bend
☐ BOM/Route
☐ Broken/Damage/Defect
☐ Burrs
☐ Contamination
☐ Countersink
☐ Cut Too Short
☐ Drawing
☐ Drill Holes
☐ Finish
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☐ Part Lost/Missing
☐ Part Moved
☐ Positioned Wrong
☐ Power Loss/Surge
☐ Pressure/Forced
☐ Set-up
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled
☐ Other

Work Order ID 90375

90375

Tuesday, June 11, 2013 3:13:42 PM

Item ID: D119-646-214 **Accept** *N9000040100* **Setup Start** *NS1*

Revision ID: **Stop** *NS2*

Item Name: Float Skidtube w/ Training Wearplates, RH

Start Date: 9/17/2012 **Start Qty:** 1.00 *1*

Required Date: 9/17/2012 **Req'd Qty:** 1.00 *1*

Cust Item ID:

Customer:

Reference: REWORK PER ECN 12-644

Run Start *NR1*

Stop *NR2*

Approvals: **Process Plan:** **Date:** **Tooling:** **Date:**

QC: **Date:** **SPC (Y/N):** **Date:**

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
176	QC5- Inspect part completeness to step on W/O	0.00							
176 QC Quality Control	Memo	0.00	DAS 16 2-20	13/10/64					
177	QC9- Inspect visual per QSI004- Fusion Welds	0.00							
177 QC Quality Control	Memo	0.00		D 13-062					DAS 09 2-88
178	Touch up alodine	0.00							
178 HandFinish Hand Finishing	Memo ✓ touch up alodine A/R touch up Paint A/R	0.00		1 x 4		ll 13/10/62			

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

DART AEROSPACE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

- Rework ☐
- Scrap ☐
- Use-as-is ☐
- Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

- Skid-tube ☐
- Machining ☐
- Thermoforming ☐
- Large Fab ☐
- Crosstube ☐
- Small Fab ☐
- Finishing ☐
- Composite ☐
- Water Jet ☐
- Prod. Eng. Coor. ☐
- Rec/Store/Packaging ☐
- Supplier ☐
- Engineering ☐
- Quality ☐
- Other ☐

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

- ☐ Bending
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- ☐ Cuffs
- ☐ Crushing
- ☐ Heat Treat
- ☐ Inspection Strip in Tube
- ☐ Marks/Chatter
- ☐ Turning Sequence
- ☐ Wave/Twist in Tube

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- ☐ Broken/Damage/Defect
- ☐ Burrs
- ☐ Contamination
- ☐ Countersink
- ☐ Cut Too Short
- ☐ Drawing
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- ☐ Set-up
- ☐ Temperature/Cure
- ☐ Weld
- ☐ Wrong Stock Pulled
- ☐ Other

Work Order ID 90375

90375

Tuesday, June 11, 2013 3:13:42 PM

Item ID: D119-646-214 **Accept** *N900040100* **Setup Start** *NS1*

Revision ID: **Stop** *NS2*

Item Name: Float Skidtube w/ Training Wearplates, RH

Start Date: 9/17/2012 **Start Qty:** 1.00 *1*

Required Date: 9/17/2012 **Req'd Qty:** 1.00 *1*

Cust Item ID:

Customer:

Reference: REWORK PER ECN 12-644

Run Start *NR1*

Stop *NR2*

Approvals: **Process Plan:** **Date:** **Tooling:** **Date:**

QC: **Date:** **SPC (Y/N):** **Date:**

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
179	QC7-Inspect Chemical Conversion Coat	0.00				1	ϕ	13-104	DAS 3348
179	**Memo**	0.00							
QC									
Quality Control									
181		0.00							
181	**Memo**	0.00				1	ϕ	13/10/04	
Skidtubes	REMOVE FWD CAP AND PUT ASIDE TO RE-INSTALL								
Skidtubes	COUNTERSINK FWD HOLES TO 0.385 X 100DEG ON BOTH SIDES PER DSI 9594-011 DEBURR								
	PER ECN 13-534								
182	QC5- Inspect part completeness to step on W/O	0.00				1		13/10/04	
182	**Memo**	0.00							
QC									
Quality Control									

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

DART AEROSPACE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

Rework ☐
Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐
Machining ☐ Small Fab ☐ Prod. Eng. Coor. ☐ Quality ☐
Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐
Large Fab ☐ Composite ☐ Supplier ☐ ☐

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

☐ Bending
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☐ Crushing
☐ Heat Treat
☐ Inspection Strip in Tube
☐ Marks/Chatter
☐ Turning Sequence
☐ Wave/Twist in Tube

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☐ BOM/Route
☐ Broken/Damage/Defect
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☐ Power Loss/Surge
☐ Pressure/Forced
☐ Set-up
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled
☐ Other

Work Order ID 90375

Tuesday, June 11, 2013 3:13:42 PM

90375

Item ID: D119-646-214 **Accept** *N900040100* **Setup Start** *NS1*

Revision ID: **Stop** *NS2*

Item Name: Float Skidtube w/ Training Wearplates, RH

Start Date: 9/17/2012 **Start Qty:** 1.00 *1*

Required Date: 9/17/2012 **Req'd Qty:** 1.00 *1*

Cust Item ID:

Customer:

Reference: REWORK PER ECN 12-644

Run Start *NR1*

Stop *NR2*

Approvals: **Process Plan:** **Date:** **Tooling:** **Date:**

QC: **Date:** **SPC (Y/N):** **Date:**

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
183		0.00							
183 HandFinish Hand Finishing	**Memo** RE-ALODINE AFFECTED AREAS TOUCH UP WITH IMRON	0.00							
	REPLACE FWD CAP USING MS24694-C52 SCREWS SIKAFLEX B126 G44								
184	QC-Inspect Chemical Conversion Coat	0.00							
184 QC Quality Control	**Memo**	0.00							
185	Identify as per dwg & Stock Location:_____	0.00							
185 Packaging Packaging	**Memo** ID AND STK UNDER NEW BATCH NUMBERAT CHANGE 004	0.00							

Powder Coat
Time in 7:45 RW
Temp: 320°F MH 13/11/07
Time out: 8:15
1x ϕ MH 13/10/07 W126125 QC3 1x ϕ MH 13/10/07

1x ϕ MH 13/10/07

DAS 27 9-89

13/10/17

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date: Work Order update only ☐

DART AEROSPACE

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

Rework ☐
Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐
Machining ☐ Small Fab ☐ Prod. Eng. Coor. ☐ Quality ☐
Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐
Large Fab ☐ Composite ☐ Supplier ☐

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

☐ Bending
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☐ Drawing
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☐ Other

Item ID: D119-646-214 **Accept** *N900040100* **Setup Start** *NS1*
Revision ID: **Stop** *NS2*
Item Name: Float Skidtube w/ Training Wearplates, RH
Start Date: 9/17/2012 **Start Qty:** 1.00 *1*
Required Date: 9/17/2012 **Req'd Qty:** 1.00 *1*
Reference: REWORK PER ECN 12-644
Cust Item ID:
Customer:

Approvals: **Process Plan:** **Date:** **Tooling:** **Date:**
QC: **Date:** **SPC (Y/N):** **Date:**

Run Start *NR1*
Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
186	QC21- Final Inspection - Work Order Release	0.00							
186									
QC	**Memo**	0.00							
Quality Control									

11-10-12

11B10-12

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

Rework	☐
Scrap	☐
Use-as-is	☐
Suspected Unapproved	☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐
Machining ☐	Small Fab ☐	Prod. Eng. Coor. ☐	Quality ☐
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐
Large Fab ☐	Composite ☐	Supplier ☐	

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

- ☐ Bending
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- ☐ Marks/Chatter
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- ☐ Folio/Program
- ☐ Grain
- ☐ Hardware
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- ☐ Out of Calibration
- ☐ Out of Sequence
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- ☐ Set-up
- ☐ Temperature/Cure
- ☐ Weld
- ☐ Wrong Stock Pulled
- ☐ Other

Picklist Print

Tuesday, June 11, 2013 3:13:42 PM

Work Order ID: 90375

Parent Item: D119-646-214

Parent Item Name: Float Skidtube w/ Training Wearplates, RH

Start Date: 9/17/2012 **Required Date:** 9/17/2012

Start Qty: 1.00 **Required Qty:** 1.00

Comments: IPP RevA: New issue DD verified by:EC IPP Rev:B 12.09.12 as per ECN12-644 DD verf:JLM IPP REV:C 12.11.05 raise to chg003 (ECN 12-675) DD verf:JLM IPP REV:D 13.03.20 raise to chg004 (ECN 13-534) DD verf:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D119-646-214 Float Skidtube w/ Training Wearplates, RH		Manufactured	No				Each	0.0000		1	1	13-6-1	
D3849-045 Aft Wearplate Assembly, Float Gear		Manufactured	No				Each	0.0000		1	1	13/10/07	
D3849-047 Fwd Wearplate Assembly, Float Gear		Manufactured	No				Each	8.0000		1	1	13/10/07	
				Location		**Loc Qty**		**Loc Code**					
				FP002		8							
				90402		8							
MS24694-C52 Screw		Purchased	No				Each	138.0000		2	2	13/10/07	
				Location		**Loc Qty**		**Loc Code**					
				ST301		138		MS126284		x2			
					124291	44							
					124308	94							

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

DART AEROSPACE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

Rework ☐
Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐
Machining ☐ Small Fab ☐ Prod. Eng. Coor. ☐ Quality ☐
Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐
Large Fab ☐ Composite ☐ Supplier ☐

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

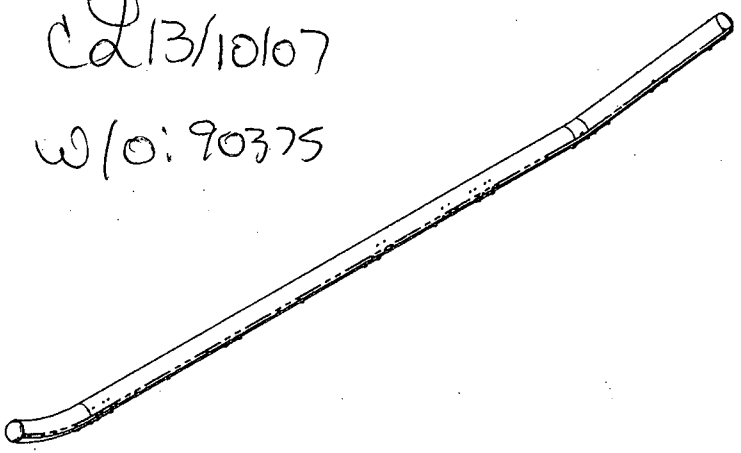
☐ Bending
☐ Centre Not Concentric
☐ Cracks
☐ Crimp/Kink/Ripple/Wave
☐ Cuffs
☐ Crushing
☐ Heat Treat
☐ Inspection Strip in Tube
☐ Marks/Chatter
☐ Turning Sequence
☐ Wave/Twist in Tube

General

☐ Bend
☐ BOM/Route
☐ Broken/Damage/Defect
☐ Burrs
☐ Contamination
☐ Countersink
☐ Cut Too Short
☐ Drawing
☐ Drill Holes
☐ Finish
☐ Fit/Function
☐ Folio/Program
☐ Grain
☐ Hardware
☐ Inspection Incomplete/Unqualified
☐ Instructions Incomplete/Unclear
☐ Misaligned/off center
☐ Mislabeled
☐ Misread
☐ Off-set
☐ Out of Calibration
☐ Out of Sequence
☐ Outside Dimensions
☐ Over/Under tolerance
☐ Part Incorrect
☐ Part Lost/Missing
☐ Part Moved
☐ Positioned Wrong
☐ Power Loss/Surge
☐ Pressure/Forced
☐ Set-up
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled
☐ Other

CL 13/10107

W/O: 90375



D3905-041 FLOAT SKIDTUBE ASSY WITH WEARPAD (SHOWN)
D3905-043 FLOAT SKIDTUBE ASSY WITH WEARPLATE (SIMILAR)
D3905-045 FLOAT SKIDTUBE ASSY WITH TRAINING WEARPLATE (SIMILAR)

ITEM	QTY -041	QTY -043	QTY -045	P/N	DESCRIPTION
1	X			D3905-041	FLOAT SKIDTUBE ASSY WITH WEARPAD
2		X		D3905-043	FLOAT SKIDTUBE ASSY WITH WEARPLATE
3			X	D3905-045	FLOAT SKIDTUBE ASSY WITH TRAINING WEARPLATE
C 10	2	2	2	D2579	CROSS BOLT SPACER
11	2	2	2	D2855-3	CAP
12	16	16		D3492-045	PLUG ASSY
C 13	2	2	2	D3672-1	PHENOLIC WASHER
14	8	8	8	D3681-1	SPACER
15	8	1	1	D3846-1	GASKET
16	1	1	1	D3846-11	GASKET
17	8	8	1	D3847-1	WEARPAD
18	1	1	1	D3847-11	WEARPAD
19		1		D3847-043	FWD WEARPLATE ASSY
20		1		D3847-045	CENTER WEARPLATE ASSY
21		1		D3847-049	AFT WEARPATE ASSY
22			1	D3849-047	FWD WEARPLATE ASSY
23			1	D3849-045	AFT WEARPLATE ASSY
24	1	1	1	D3885-3	FLOAT WEB
25	1	1		D3905-11	FLOAT SKIDTUBE
26			1	D3905-13	FLOAT SKIDTUBE
27	12	12	12	D3903-1	SPACER
28			16	D3904-1	WASHER
29	12	12	12	D3672-3	WASHER
30	12	12	12	D3683-3	INSERT
31			16	D3411-3	WASHER
41	42	42	10	ALS4-1032-130	INSERT
C 42	44	44	12	AN3C5A	BOLT
43			4	AN3C46A	BOLT
44			4	AN3C50A	BOLT
C 45	44	44	8	NAS1149C0332R	WASHER (OR AN960C10L)
46	12	12	12	NAS1149C0463R	WASHER (OR AN960C416)
47			8	MS21043-3	NUT
48	12	12	12	MS27039C4-08	SCREW
C 49	2	2	2	MS24694-C52	SCREW

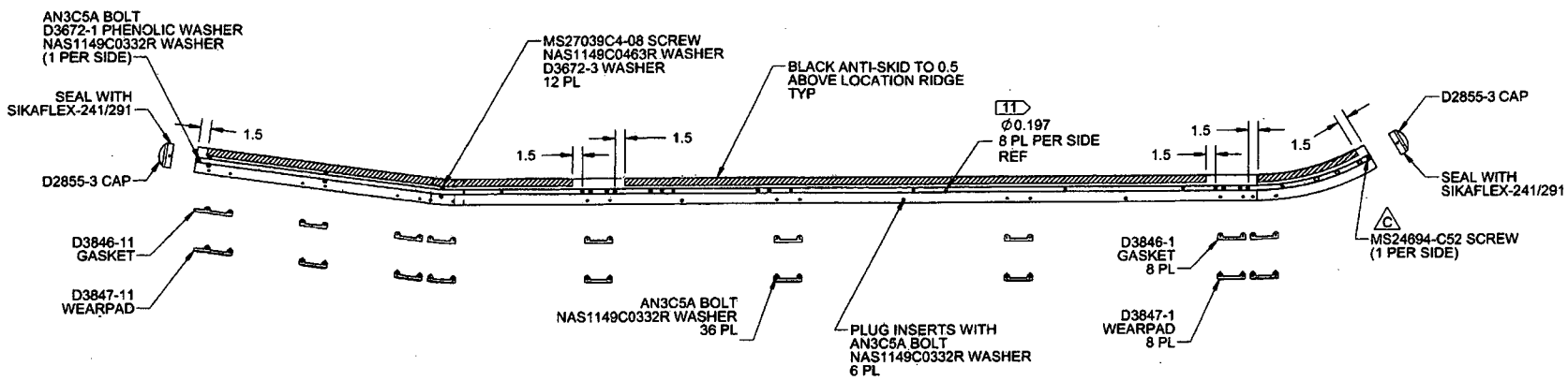
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2013 -03- 19

NOTES:
1) MATERIAL: N/A
2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 PRIOR TO INSERTING D3885-3 FLOAT WEB
POWDER COAT "WHITE" (4.3.5.1) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT AS INDICATED TO 0.5 ABOVE LOCATION RIDGE PER DART QSI 005 4.4
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: NONE
7) WEIGHT: D3905-041 = 40.7 lbs
D3905-043 = 47.0 lbs
D3905-045 = 47.3 lbs
8) WELD PER DART QSI 004
9) DAMAGE TOLERANCE ON FWD BEND:
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 8.5 INCHES ABOVE THE GROUND. IT IS ACCEPTABLE TO POLISH OUT GOUGES UP 0.020" DEEP IN THE BENT PORTION OF THE TUBE. A MAXIMUM REDUCTION IN DIAMETER OF 0.150" IS ACCEPTABLE IN THE BENT PORTION OF THE TUBE.
10) INSERT D3885-3 WEB TO LOCATION SHOWN OFF AFT END OF SKIDTUBE AND BOND WEB INTO OUTER TUBE WITH SIKAFLEX-241/-291 ADHESIVE PER DART QSI 015 BEFORE BENDING. ENSURE HOLES LINE-UP
11) INSERT D3492-045 PLUG ASSY INTO Ø0.197 HOLES (BOTH SIDES OF TUBE)
12) USE DART DRILL TEMPLATE DT8932 TO LOCATE AND DRILL Ø0.297 HOLES FOR WEARPLATE INSERTS. INSTALL AELS-1032-130 INTO D3905-11 ONLY. INSTALL AN3C5A BOLTS AND NAS1149C0332R WASHERS WITH SIKAFLEX-241/-291.

REV.	DESCRIPTION	BY	DATE
C	(SHT 1 P/L, ZN C2-2, C2-3, C2-4) ITEM 13, QTY 2 WAS 4, ITEM 42 AND 45, QTY 44 WAS 46, ADD ITEM 49, MS24694-C52 WAS AN3C5A, D3672-1 AND NAS1149C0332R, (ZN C7-7) Ø0.201 CSK Ø0.385 X 100° WAS Ø0.204 THRU, (ZN A4-5, A4-6) ADD RELIEF INSTRUCTION, ADD ITEM 10, CROSS BOLT SPACER (ZN D4-1, C6-7, D8-7)	DB	13.02.21
B	REVISED PART LIST, ALS4-1032-130 WAS AELS-1032-130 (ZN A6-5, A5-6, C5-7, C3-7, A5-7); ADD DT8932 (ZN A8-1); D2855-3 WAS D2575 (ZN C8-2, C1-2, C6-3, C1-3, C6-4, C1-4); AN3C5A WAS AN3C4A (ZN C7-2, C1-2, C7-3, C1-3, C7-4, C1-4); D3849-047 WAS D3849-041 (ZN B3-4); ADD D3411-3 (ZN B3-4); ADD AN3C50A (ZN B3-4); Ø0.313 WAS Ø0.328 (B2-5, B2-6, C2-7, A8-7 & D7-8), REVISED NOTE iv (ZN A8-7)	RF	09.06.30
A	NEW ISSUE	RF	09.03.30

DESIGN	RF	DART AEROSPACE USA, INC. KENT, WA
DRAWN	DB	
CHECKED	[signature]	DRAWING NO. D3905 REV. C
MFG. APPR.	[signature]	SHEET 1 OF 8
APPROVED	[signature]	TITLE A119 FLOAT SKIDTUBE ASSY SCALE NTS
DE APPR.	[signature]	
DATE	13.02.21	

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D3905-041 FLOAT SKIDTUBE ASSY WITH WEARPAD
(MAKE FROM D3905-11 SKIDTUBE)

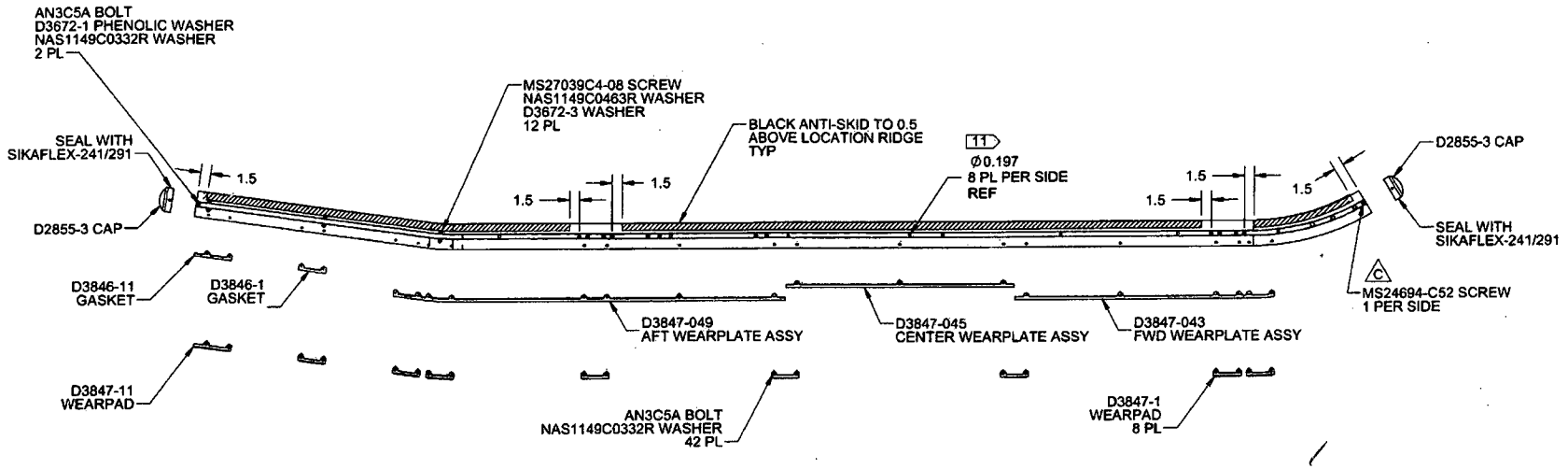
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DESIGN	RF	**DART AEROSPACE USA, INC.** KENT, WA
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CHECKED	AJS	DRAWING NO. D3905 REV. C
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APPROVED		TITLE: A119 FLOAT SKIDTUBE ASSY SCALE NTS
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AJS



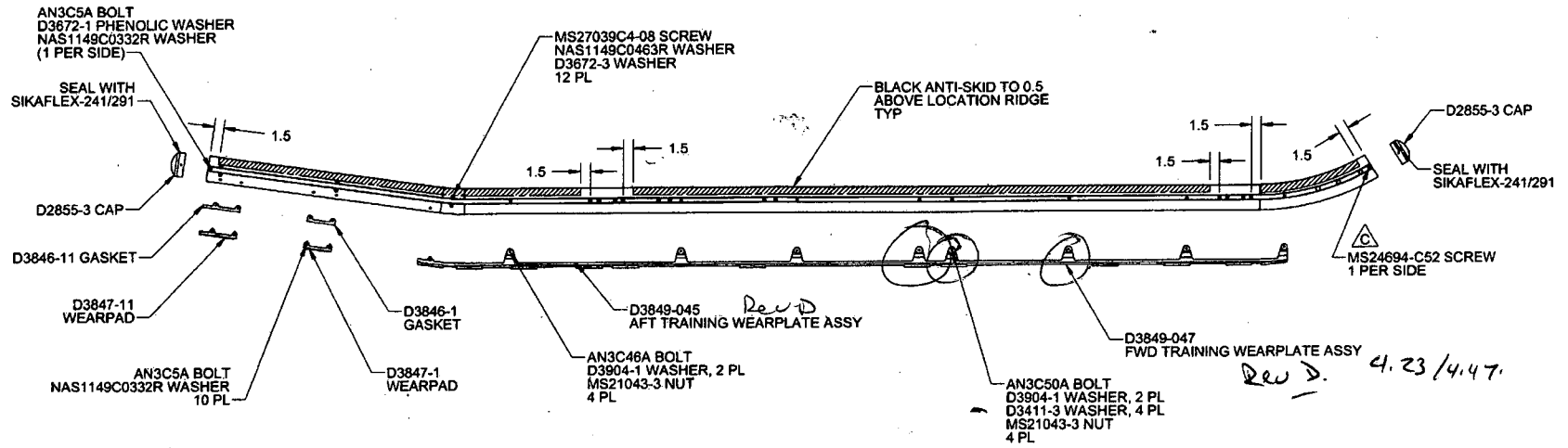
D3905-043 FLOAT SKIDTUBE ASSY WITH WEARPLATE
(MAKE FROM D3905-11 SKIDTUBE)

90371

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DATE 13.02.21		

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Rev D.

4.23/4.47.

D3905-045 FLOAT SKIDTUBE ASSY WITH TRAINING WEARPLATE

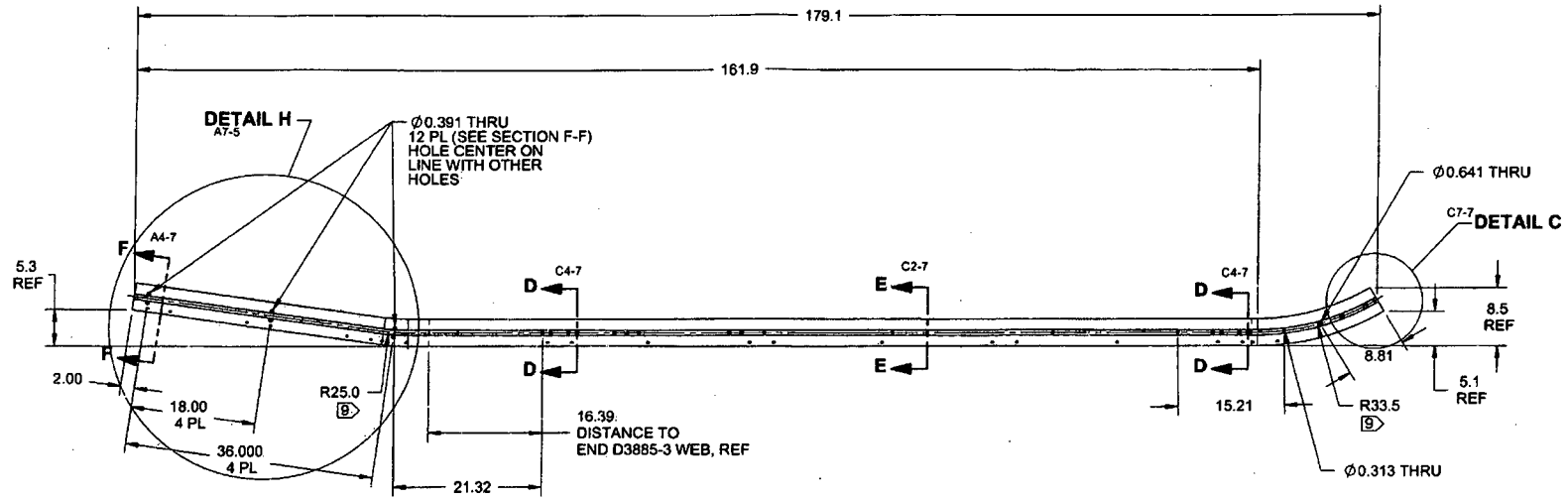
(MAKE FROM D3905-13 SKIDTUBE)

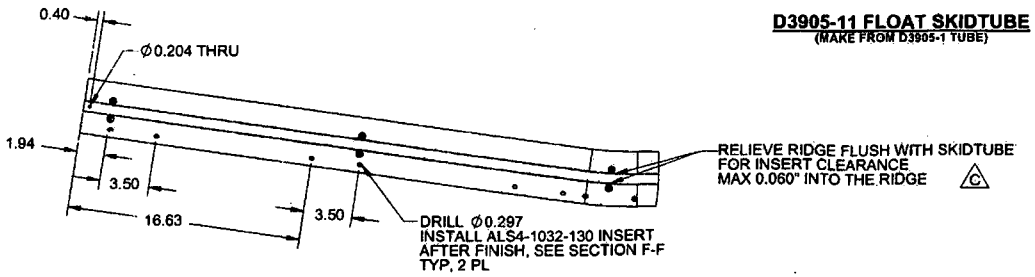
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DETAIL H C7-5
SCALE 2X

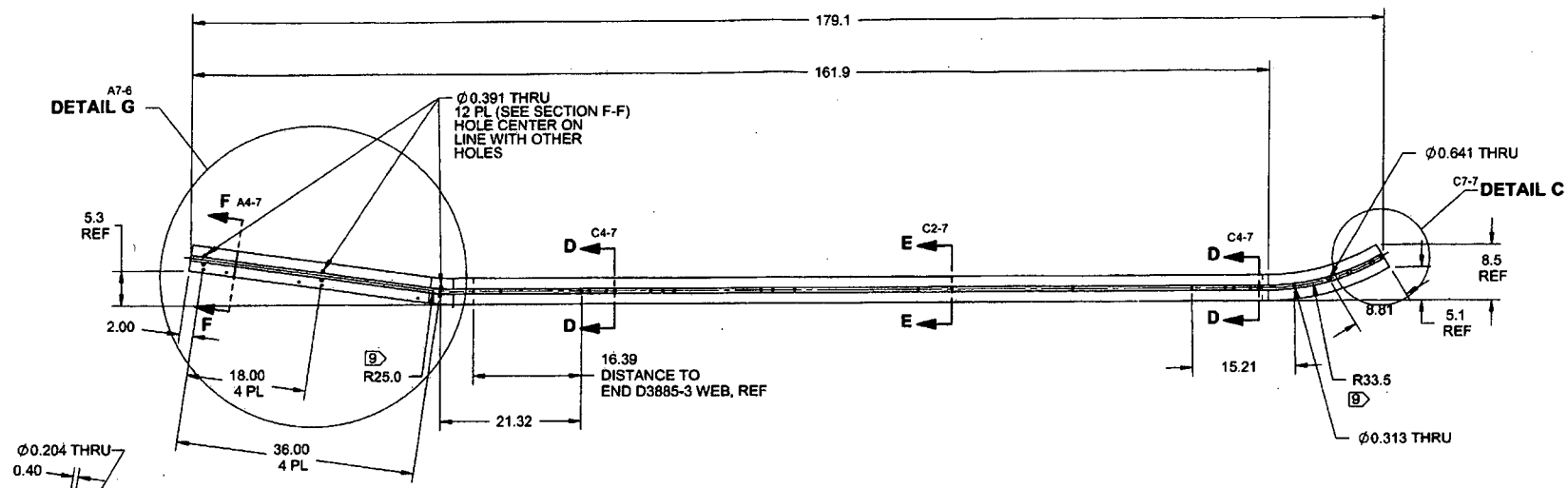
D3905-11 FLOAT SKIDTUBE
(MAKE FROM D3905-1 TUBE)

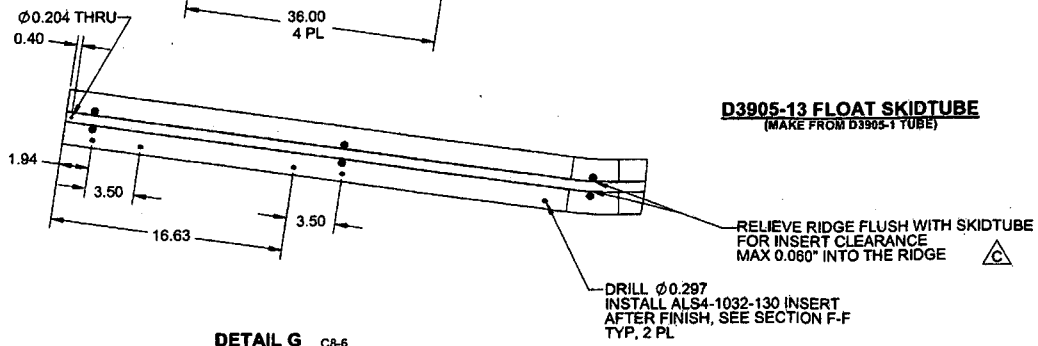
90325

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DE APPR.		
DATE 13.02.21		

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D3905-13 FLOAT SKIDTUBE
(MAKE FROM D3905-1 TUBE)

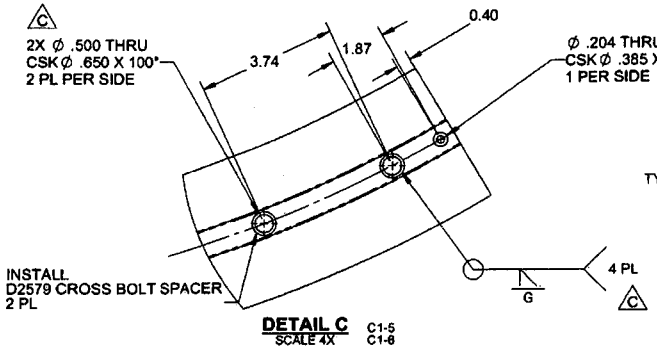
DETAIL G C8-6
SCALE 2X

90325

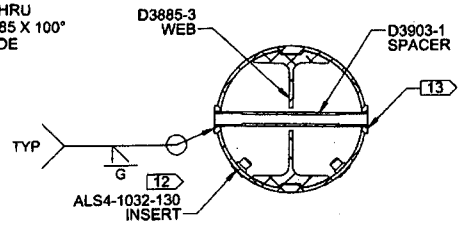
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DATE 13.02.21		

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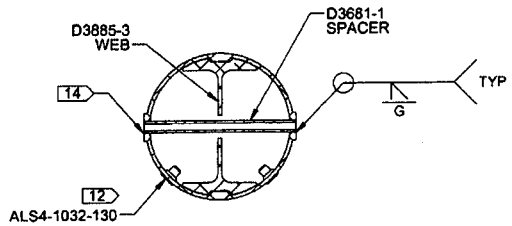


DETAIL C C1-5 C1-6
SCALE 4X



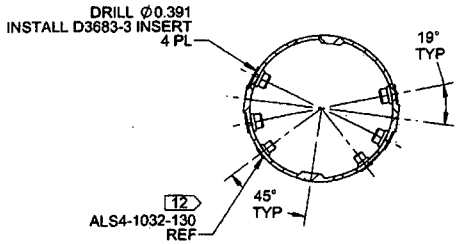
SECTION D-D C5-5 C2-5 C5-6 C2-6
SCALE 4X

(FOR 12 x Ø0.375 HOLES PER SKIDTUBE)



SECTION E-E C4-5 C4-6
SCALE 4X

(FOR 8 x Ø0.313 HOLES PER SKIDTUBE)



SECTION F-F C7-6 C7-5
SCALE 4X

NOTES:

13) AFTER DRILLING AND BENDING ASSEMBLY
PERFORM THE FOLLOWING FOR Ø0.375 HOLES ONLY:
i) CHAMFER HOLES Ø0.475 x 45° (BOTH SIDES)
ii) INSERT D3903-1 SPACER
iii) WELD INTO PLACE AND GRIND FLUSH
iv) C'BORE TO 0.313 x 0.75 DEEP
v) DEBURR HOLES

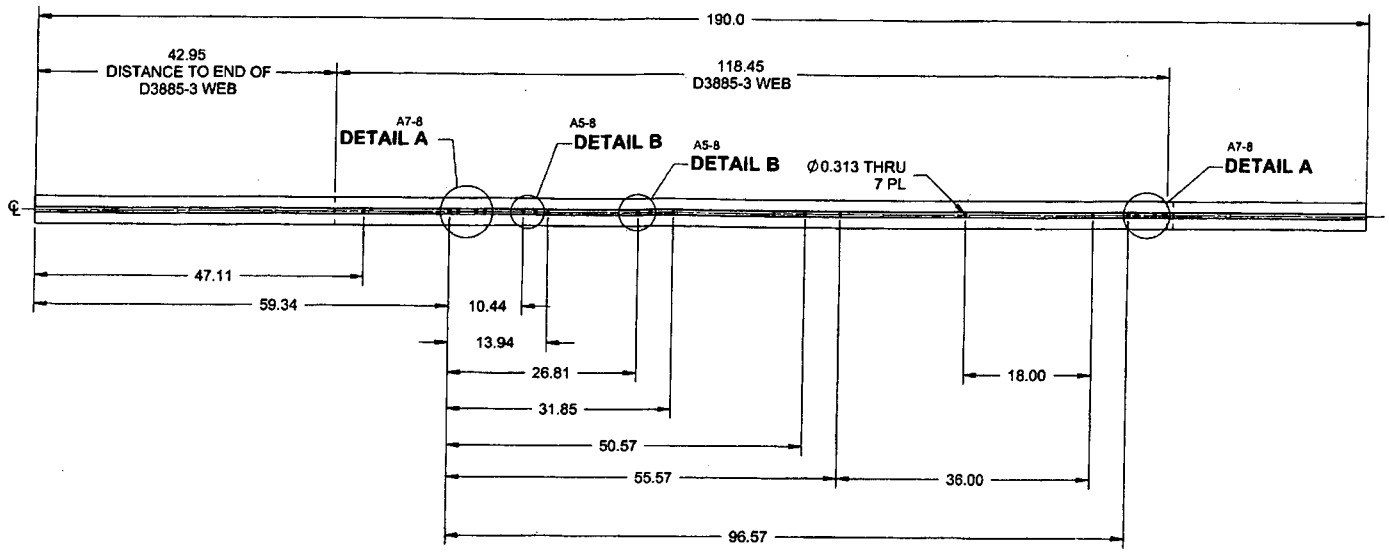
14) AFTER DRILLING AND BENDING ASSEMBLY
PERFORM THE FOLLOWING FOR Ø0.313 HOLES ONLY:
vi) CHAMFER HOLES Ø0.354 x 45° OR 0.050 DEEP x 45° (BOTH SIDES)
vii) INSERT D3681-1 SPACER
viii) WELD INTO PLACE AND GRIND FLUSH
ix) DEBURR HOLES

90375

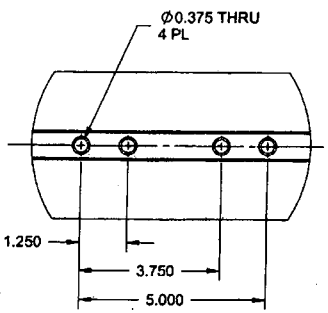
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2013 -03- 19

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APPROVED		TITLE A119 FLOAT SKIDTUBE ASSY SCALE NTS
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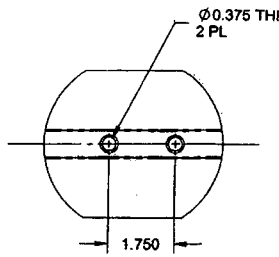
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D3905-1 TUBE
(MAKE FROM D2500-1-190 EXTRUSION)



DETAIL A D6-8 D2-8
SCALE 4X



DETAIL B D5-8 D4-8
SCALE 4X

90321

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DESIGN	RF	DART AEROSPACE USA, INC. KENT, WA	
DRAWN	DB		
CHECKED		DRAWING NO. D3905	REV. C
MFG. APPR.			SHEET 8 OF 8
APPROVED		TITLE A119 FLOAT SKIDTUBE ASSY	SCALE NTS
DE APPR.			
DATE 13.02.21			

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* New Parts installed:

Part No:	Batch No	Quantity:
MS21043-3 (Nut)	M124555	X8
D3683-3 (inserts)	B47805	X12
AHS4-1032-130 (inserts)	M126109	X10
D3672-1 (phelonic washer)	B99099	X2
AN3C5A (bolts)	M125388	X10
D3904-1 (washer)	B102405	X10
D3904-1 (washer)	B98685	X6
D2855-3 (end-caps)	B102169	X2
AN3C-46C (bolts)	M126007	X4
AN3C-50A (bolts)	M126482	X4
D3411-3 (washer)	B8638	X16
NAS1149C0332R (washer)	M125654	X10

9635

ork Order ID 90375

90375

Tuesday, June 11, 2013 3:13:42 PM

Item ID: D119-646-214 **Accept** *N900040100* **Setup Start** *NS1*

Revision ID: **Stop** *NS2*

Item Name: Float Skidtube w/ Training Wearplates, RH

Start Date: 9/17/2012 **Start Qty:** 1.00 *1*

Required Date: 9/17/2012 **Req'd Qty:** 1.00 *1*

Cust Item ID:

Customer:

Reference: REWORK PER ECN 12-644

Approvals: **Process Plan:** CMF **Date:** 13-6-11 **Tooling:** **Date:** **Run Start** *NR1*

QC: **Date:** **SPC (Y/N):** **Date:** **Stop** *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	**Revision Nbr**								
IIN-D119-646	B								
150		0.00							
150		0.00							
Packaging	**Memo**								
Packaging	-PULL FROM STK: 1 X D119-646-214 B87041 REWORK PER ECN12-675 (PER DEO D3887-B-1) & ECN 13-534 (DSI 9594-011) MUST GO UP TO CHANGE 004 ensure kit is kept in original box ! ECN 12-644, 12-675 & 13-534								
160		0.00							
160		0.00							
HandFinish	**Memo**								
Hand Finishing	REMOVE D3849-045 X 1 AND D3849-047 X 1 AND SCRAP REPLACE WITH NEW D3849-045 X 1 B 90401 D3849-047 X 1 B 90402								

MCS 13-10-08

DART
Dart Aerospace Ltd.
1270 ABERDEEN ST.
HAWKESBURY, ON, CANADA K6A 1K7
TC APPROVAL # 09-89
TEL: 1-613-632-5200

P/N	D119-646-214	CHG	CHG001
DESC.	Float Skidtube, RH	STC	SR02024SE
LOT	B87041	STC	
MODEL	Agusta A119/AW119MKII	STC	

PATENTS: US #5735484 / CA #2222184 EUROPEAN No. # 0828655 MADE IN CANADA D2729-2

1x [illegible] 13/10/03

* Strip entire skidtube

1x [illegible] 13/10/03

PTO
LAST PAGE!